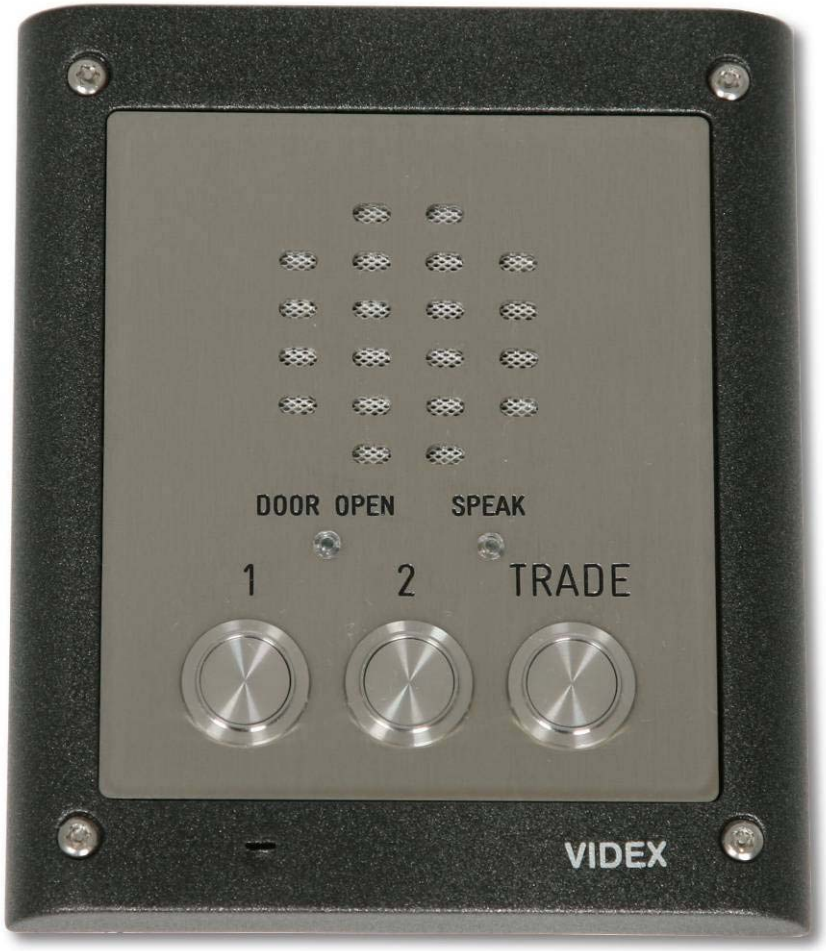
4000 SERIES (4+1) VANDAL RESISTANT DOOR ENTRY SYSTEM



TECHNICAL MANUAL
EDITION 1.1

VIDEX
The Power to Secure

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MANUAL INTRODUCTION

The information in this manual is intended as an installation and commissioning guide for the vandal resistant 4000 Series door entry systems. This manual should be read carefully before the installation commences. Any damage caused to the equipment due to faulty installations where the information in this manual has not been followed is not the responsibility of Videx Security Ltd.

VIDEX run free training courses for engineers who are not familiar with the Videx product range. Technical help is also available on 0191 224 3174 during office hours or via e-mail tech@videx-security.com.

SYSTEM INTRODUCTION

This kit will enable a caller at an entrance point to signal an occupant in the dwelling by pressing a call button which will send an electronic call tone to an audio telephone. A Yellow 'SPEAK' LED will indicate the call has been answered and a two way conversation can take place, the occupant can release an electric lock release by pressing a button on the telephone base unit. The output for the lock is a dry contact relay allowing any type of lock can be used with an appropriate PSU. If this system is to be used with a gate, the dry contact output can be used to trigger the gate control board. DDA features such as a 'SPEAK' LED, 'DOOR OPEN' LED and reassurance tones are standard on this system.

The system is available modular and non-modular. The modular system allows a door panel to be assembled from a range of modules including amplifiers, button modules, camera modules and access control modules. The modules are then assembled into the 4000 Series frames using the brackets and screws supplied.

SYSTEM COMPONENTS

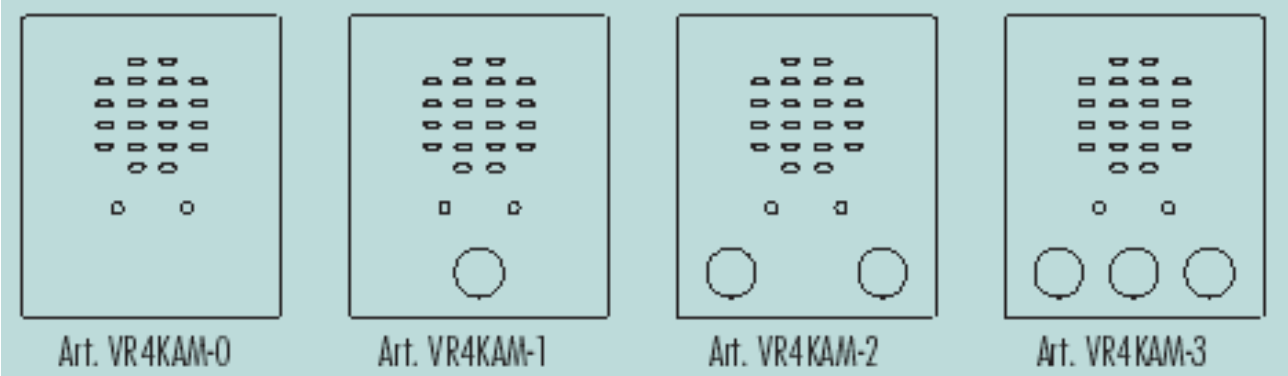
The system comprises of door panels, telephones/videophones and power supplies. Relays will also be used on multiple door video systems but there are no switches required for multiple door audio systems as was the case with the older systems. The door panel may be made up of several parts including modules and a surface or flush frame. These modules are easily assembled into the frames using the brackets and screws supplied with each module. The order in which the modules fit into the frames is down to customer taste but we would suggest keeping the amplifier module as far from the microphone holder as possible to avoid Larsen affect.

DOOR PANEL

The vandal resistant door panel will consist of an amplifier, buttons, frame/back box and optional items such as camera and access control features (Codelock, proximity etc). Frame sizes are available for 1, 2, 4, 6 and 9 modules in both surface and flush fitting configurations. Call buttons can be engraved to suite the apartment numbers.

AMPLIFIER (Art.136)

The amplifier is the most important part of the system and controls the operation of the system including speech, door release call to apartment etc. It contains a microprocessor which controls all of these features.



Amplifier module connections

Connection	Function
1	Receive speech from apartment
2	Transmit speech to apartment
+	+12Vdc input
-	0V (Ground)
5	Switched 0V from phone to trigger door release relay
T	Electronic call tone output to common side of call buttons
-	0V for use with push to exit input (PTE)
PTE	Switched 0V input from push to exit button to trigger door release relay
C	Common connection of dry contact relay
NC	Normally closed connection of dry contact relay
NO	Normally open connection of dry contact relay
D+	External link to door open (+12V side) LED.
D-	External link to door open (0V side) LED.
BSY	Busy signal for use with multiple door systems (Normally high, 12V. Low when busy 0V)
SL	Switched 0V output to switch on video PSU. (0V throughout a call, open collector standby)
F1	Switched 0V output to switch on camera. (0V throughout a call, open collector in standby)

Amplifier Dip-Switches

The four way dip-switch bank has the following functions. Please note: dip-switches must be set before power up. Any changes made when power is on will not take effect until a power down reset.

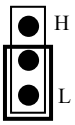
Speech time	
Switch 1 OFF	1 Minute
Switch 1 ON	2 Minutes

Relay time	
Switch 2 OFF Switch 3 OFF	2 Seconds
Switch 2 OFF Switch 3 ON	4 Seconds
Switch 2 ON Switch 3 OFF	8 Seconds
Switch 2 ON Switch 3 ON	20 Seconds

Speech live	
Switch 4 OFF	Only when called
Switch 4 ON **(Only possible on one door systems)**	Speech live whenever handset lifted

Amplifier jumper

Jumper JP controls the reassurance tone volume level at the door panel.



Position H	High volume reassurance tones
Position L	Low Volume reassurance tones
No Jumper	No reassurance tones

Amplifier speech volume POTS

Speech volume adjustments are carried out at the door panel using a small trimmer driver.

Adjustment for speech volume at the apartment

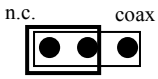
Adjustment for speech volume level at the door station

CAMERA (Art.VR4KCMM – Mono & Art.VR4KCMC - Colour)

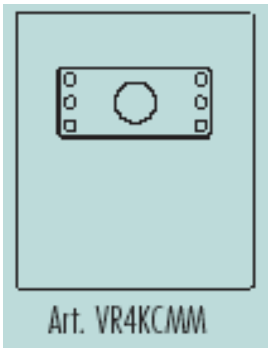
The camera module is available in both mono and colour and can be set for either coax installations or non-coax installations. A tilt adjustment is available on the rear of the camera allowing the camera to be tilted 10° in any direction. Simply loosen the screw slightly in the middle of the ball joint, tilt to the required angle and then tighten the screw.

Camera jumper

The jumper controls the type of video signal output from the camera.



Position n.c.	Balance video **(Use V1 & V2)**
Position Coax	75Ω Coax video **(Use V & -)**

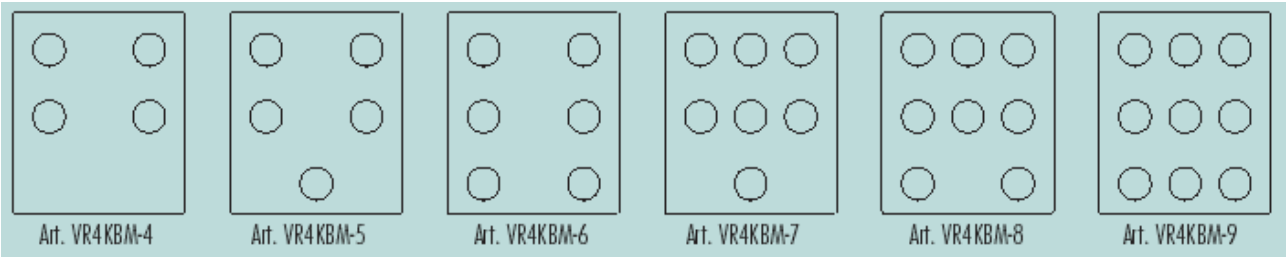


Camera module connections

Connection	Function
+	14-20Vdc supply to power camera
SB	+ connection to internal camera heater 12V
-	0V (Ground) camera connection
V	Coax video output (Used when jumper is set to **coax**)
V1	Video + for balanced video systems (jumper set to **n.c.**)
V2	Video - for balanced video systems (jumper set to **n.c.**)
SB	- connection to internal camera heater 0V

BUTTON MODULES

All call buttons are dry contact push to make buttons. The buttons are supplied unwired. For call buttons, one side on each button will common together and connect to T (Call tone output) on the amplifier module. When a button is used as a trade button in conjunction with a time clock, the button should be wired directly to the time clock and not linked to any call buttons.



VPROX PROXIMITY READER (Art.VR4KVPM)

The Vprox proximity module works in conjunction with a VPROX controller. For more information regarding the programming of the proximity system please consult the VPROX manual supplied withy the controller.

Proximity module connections

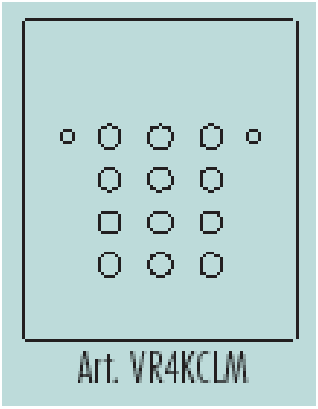
Connection	Function	Colour
-	0V power connection	Grey
12V	12Vdc power connection	White
RK	Serial data connection to controller	Yellow
LR	Red LED control line (Also controls the internal sounder)	Brown
LG	Green LED control line (Also controls the internal sounder)	Green

CODE LOCK (Art.VR4KCLM)

The codelock module can be powered from 12-24V AC or DC and includes three dry contact relay outputs and two switched 0V push to exit button inputs which can be used to trigger relay 1 & 2). 1 code per relay can be programmed into the device. Codes can be 4-8 digits long. Relay time can be 01-99 seconds or latching (00). When in latching mode, enter the code followed by Enter to latch and the code followed by Clear to unlatch.

Codelock module connections

Connection	Function
+	12-24V AC or DC power input
-	0V power input
C1	Relay 1 common connection
NO1	Relay 1 normally open connection
NC1	Relay 1 normally closed connection
C2	Relay 2 common connection
NO2	Relay 2 normally open connection
NC2	Relay 2 normally closed connection
C3	Relay 3 common connection
NO3	Relay 3 normally open connection
NC3	Relay 3 normally closed connection
SW1	Switched 0V input to trigger relay 1
SW2	Switched 0V input to trigger relay 2



Codelock programming can be found towards the end of this manual

POWER SUPPLIES

Art.520M

The power supply is the Art.520M. Outputs of 12Vdc (200mA), 8Vdc (300mA) and 13Vac (1A) are available. The dc outputs are designed to power the amplifier modules only and must not be used to power other devices such as lock releases etc. These items must be connected to the AC output of this power supply or an auxiliary power supply.

CONNECTIONS

Terminal		Function
+12		12Vdc output (200mA Max.)
+8		8Vdc output (300mA Max.)
-		0V (Ground)
~		13Vac (1A Max.)
230		Mains in (Live connection)
0		Mains in (Neutral connection)

Fuse compartment

AC FUSE: 1.6A
20mm quick blow

DC FUSE: 315mA
20mm quick blow

NOTE: ANY 1A 13.8Vdc PSU can be used with this amplifier as an alternative to the 520M.

Art.520MR

This power supply combines both a 520M and a 506 relay into one and can be used instead of the 520M on multiple door video systems. Outputs of 12Vdc (200mA), 8Vdc (300mA) and 13Vac (1A) are available. The dc outputs are designed to power the amplifier modules only and must not be used to power other devices such as lock releases etc. These items must be connected to the AC output of this power supply or an auxiliary power supply.

CONNECTIONS

Terminal		Function
+12		12Vdc output (200mA Max.)
+8		8Vdc output (300mA Max.)
-		0V (Ground)
~		13Vac (1A Max.)
230		Mains in (Live connection)
0		Mains in (Neutral connection)
M		Relay coil ground
B		Relay coil +20-24V input option
A		Relay coil +12 input option
NC2		Pole 2 normally closed relay connection
C2		Pole 2 common relay connection
NO2		Pole 2 normally open relay connection
NC1		Pole 1 normally closed relay connection
C1		Pole 1 common relay connection
NO1		Pole 1 normally open relay connection

Fuse compartment

AC FUSE: 1.6A
20mm quick blow

DC FUSE: 315mA
20mm quick blow

Art.893M (Video power supply)

20Vdc 800mA continuous 1A surge PSU and is used to power the videophones and camera on video systems and can also be used as a booster supply or when more than two videophones are required in an apartment. This power supply only has an output when either a 0V is applied to –C or when a voltage is applied to +C. At all other times the + output is switched off.

Connection	Function
230V~ 0	Mains voltage input
+	Switched 20Vdc output (Triggered by –C or +C)
-	0V
-C	0V trigger input (From 4V to 0V)
+C	+ volts trigger input (From 8V up to 30V)
D+	Switched +20Vdc output via diode

The mains inputs to this system must be connected via an all pole circuit breaker to the mains supply as there are no internal fuses on the primary side of the transformer.

Art.701

BST/GMT digital time clock. This time clock operates from a 12Vac or dc power supply. The output is a dry contact relay. When used with this system the trade button input is used. This allows the dry contact relay to drive the lock release directly. The relay can be programmed to release the lock for 1 – 99 seconds.

Connection	Function
+	12Vac or dc voltage input
-	0V
TR	Trade button input (Switched 0V)
C	Common connection on relay
NO	Normally open connection on relay
NC	Normally closed connection on relay

For more information see time clock instruction sheet

TELEPHONE

Art.3111

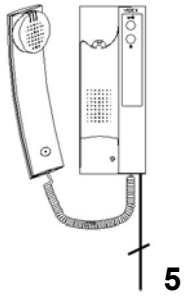
The Art.3111 is a white ABS plastic wall mounting electronic call telephone and includes a lock release push button and spare dry contact button. There is a three position call volume control external to the top left side of the telephone.

Art.3011

Smart line phone includes a lock release push button only.

CONNECTIONS:-

	Function
1	Transmit speech to the door panel
2	Receive speech from the door panel
3	0V
4	Call tone input
5	Lock trigger (Switched 0V)
6	Not used
8	One side of spare dry contact button (Max. 200mA 24V)
9	Second side of spare dry contact button (Max. 200mA 24V)

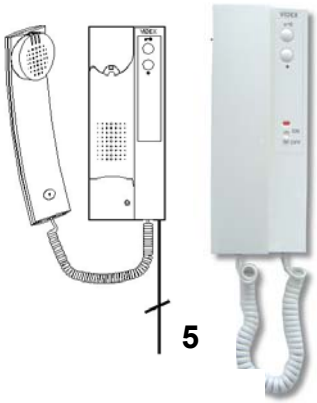


Art.3112

The Art.3112 telephone includes a lock release push button and spare dry contact 'push to make' button for other services. Additionally it includes a slide mute switch to turn the phone off when the tenant does not want to be disturbed.

CONNECTIONS:-

	Function
1	Transmit speech to the door panel
2	Receive speech from the door panel
3	0V
4	Call tone input
5	Lock Trigger (Switched 0V)
6	Not used
8	Dry contact switch
9	

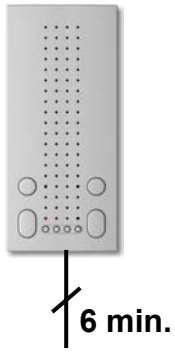


Art.5118

The Art.5118 apartment station has full duplex speech, privacy facility, door release and service button and is available in white, silver or carbon fibre finishes.

Art.5112

As the 5118 but with simplex speech only.



CONNECTIONS:-

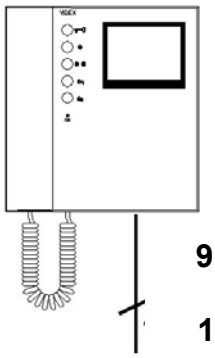
Terminal	**Signal**	**Function**
1	2A	Receive speech from door panel
2	4A	Call tone input
3	+12V	+12Vdc power supply input
4	GND	Ground
5	1A	Transmit speech to door panel
6	LB or ●●	Local door bell switched 0V input on **5118** or 0V open collector output on **5112**
7	5A	Door release button output (Switched 0V)
8	●	Open collector 0V output from push button ●●
9	+DOL/AUL	+12V side of door open LED on **5112** or AUX LED ground on **5118**
10	-DOL/DOL	- side of door open LED on **5112** or Door open LED ground on **5118**

Art.3312

The Art.3312 (3412 for colour) includes a lock release push button, camera recall button and three dry contact push to make spare push buttons for other services. Coax and non-coax video can be used by setting the relevant dip-switches. An Art.3980 back plate is required with this videophone.

CONNECTIONS:-

Terminal	Signal	Function
1	+12V Out	+12V out to power video splitter
2	TV1	Camera recall (● Button)
3	TV2	Spare button (●● Button)
4	1	+20V power input
5	2	Door release command
6	3	Transmit speech to door panel
7	4	Receive speech from door panel
8	5	Speech Ground
9	6	Video power ground
10	7	Local call tone input
11	V/V1	Coax centre core or balance video –sync (V1)
12	M/V2	Coax Screen or balanced video +sync (V2)
13	R	Speech common for intercommunicating systems
14	C	Call tone input
15	-	Speech ground for intercommunicating systems
16	T	Common of spare buttons
17	1T	Spare button
18	2T	Spare button



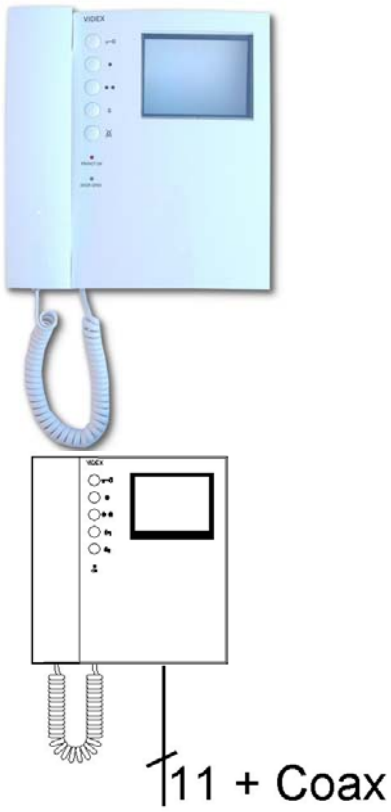
9 + Coax
Or
11 cores

DIP SWITCH SETTINGS

Answer mode, service button operation and video mode							
Coax Default Settings	*Balanced Default Settings*	*Switches*	*Status*	*Factory Default Settings*	*Function*	*Terminal*	*Button*
				Answer Mode Setup			
		1,2	ON, OFF	☒	*Incoming call switches on the monitor*		
			OFF, OFF		*Incoming call does not switch on the monitor*		
				Service Push Buttons Operating Mode Setup – Configurazione Funzionamento Pulsanti di Servizio			
		3,4	ON, OFF		*Recall command*	18	S2
			OFF, ON	☒	*Dry contact between terminal **18** & **16***		
		5,6	ON, OFF		*Recall command*	17	S1
			OFF, ON	☒	*Dry contact between terminal **17** & **16***		
		7,8	ON, OFF		*Recall command*	3	● ●
			OFF, ON	☒	*Dry contact between terminal **3** & **16***		
				Video Mode Setup – Configurazione Modo Video			
		9,10	ON, ON	☒	*Coax video signal*	11 = V 12 = M	11,12	
			OFF, OFF		*Balanced video signal*	11 = V1, 12 = V2 *		
		1,2,3	ON, ON, ON		*Balanced video signal*			
			ON, OFF, OFF	☒	*Coax video signal*	11 = V 12 = M		

Art.3313

The Art.3313 (3413 for colour) includes a lock release push button and two dry contact push to make spare push buttons for other services. An Art.3980 back plate is required with this videophone.



CONNECTIONS:-

Terminal	Signal	Function
1	+12V OUT	+12V out to power video splitter
2	TV1	Camera recall (● Button)
3	TV2	Camera recall or switch to terminal 16 (Dip switch dependant) (●● Button)
4	1	+20V power input
5	2	Door release command
6	3	Transmit speech to door panel
7	4	Receive speech from door panel
8	6	0V (Ground)
9	5	Not used
10	7	Local call tone input
11	V/V1	Coax centre core or non-coax sync- (V1)
12	M/V2	Coax Screen or non-coax Sync+ (V2)
13	D	Switched +12 for door open LED
14	C	Select input to switch on videophone
15	C1	Call tone input
16	T	Common of spare buttons ●●, ● and S
17	1T	Spare button (S button)
18	+12V IN	+12V to power videophone privacy

DIP SWITCH SETTINGS

8 Way dip switch (Switches 1 – 5)

Mute Duration time					
Time	**1**	**2**	**3**	**4**	**5**
15 Minutes	ON	OFF	OFF	OFF	OFF
30 Minutes	OFF	ON	OFF	OFF	OFF
2 Hours	OFF	OFF	ON	OFF	OFF
4 Hours	OFF	OFF	OFF	ON	OFF
8 Hours	OFF	OFF	OFF	OFF	ON

8 Way dip switch (Switch 6)

Mute LED	
Switch	**6**
Fixed	OFF
Flashing	ON

8 Way dip switch (Switches 7 & 8)

°° Button Operation		
Switch	**7**	**8**
Camera recall	ON	OFF
Dry contact	OFF	ON

4 Way Dip Switch (Switches 1 & 2)

S Button Operation		
Switch	**1**	**2**
Camera recall	ON	OFF
Dry contact	OFF	ON

4 Way Dip Switch (Switches 3 & 4)

VIDEO MODE		
Switch	**3**	**4**
Coax	ON	ON
Non-Coax	OFF	OFF

3 Way Dip Switch

VIDEO MODE continued			
Switch	**1**	**2**	**3**
Coax	OFF	OFF	OFF
Non-Coax	ON	ON	ON

Art.5418

The 5418 colour Eclipse is available surface, flush and with a handset. Features include full duplex speech, door release, latching relay, 2x momentary outputs and timed privacy. A 5980 back plate or flush box is required for mounting

CONNECTIONS:-

Terminal	Signal	Function
1	+20	20Vdc input
2	NC2	Latching relay NC connection (●● Button)
3	COM2	Latching relay CO connection (●● Button)
4	NO2	Latching relay NO connection (●● Button)
5	S1	Switched 0V output (**S1** Button)
6	T	Camera recall button
7	S2	Switched 0V output (**S2** Button)
8	V1	Balanced video V1 input
9	GND	Ground
10	V2/V	Balanced video V2 input or coax video input
11	GND	Ground
12	LD	+12V input to activate door open LED
13	C	Call input trigger
14	+12	+12Vdc permanent input
15	3	Transmit speech line to the door panel
16	+VD	Switched +12V output to power video splitters
17	4	Receive speech line from the door panel
18	NO1	Door release relay output NO connection
19	COM1	Door release relay output CO connection
20	NC1	Door release relay output NC connection

Art.5412

The 5412 colour Eclipse comes complete with a handset and includes a simplex speech option. Features include door release, 3x momentary outputs and timed privacy. A 5980 back plate is also required per videophone

CONNECTIONS:-

Terminal	Signal	Function
1	+20	20Vdc input
2	GND	Ground
3	V1	Balanced video V1 input
4	V2/V	Balanced video V2 input or coax video input
5	+VD	Switched +12V output to power video splitters
6	3	Transmit speech line to the door panel
7	4	Receive speech line from the door panel
8	C	Call input trigger
9	T	Camera recall button
10	+12	+12Vdc permanent input
11	LB	Local bell input
12	LD1	+12V input to activate door open LED
13	LD2	+12V input to activate Aux. LED
14	GND	Ground
15	NO1	Door release relay output NO connection
16	NC1	Door release relay output NC connection
17	COM1	Door release relay output CO connection
18	S1	Switched 0V output or camera recall (**S1** Button)
19	S2	Switched 0V output or camera recall (**S2** Button)
20	●●	Switched 0V output or camera recall (●● Button)

5418 VIDEO SETUP & PROGRAMMING

3 Way dip-switch

1	2	3	Video Mode
ON	OFF	ON	Coax video signal
OFF	ON	ON	Balanced video signal

Switch 3 = Video end of line resistor

To enter programming mode to carryout the following settings, press the two following buttons at the same time (left button of the volume control and the right button of the colour intensity control) (far left button and far right button together). When the programming mode is entered LED 1 (The LED next to the ●● button) starts flashing. This will automatically reset after 20 seconds of idle time.

Door opening time (Factory preset 4 seconds)

After entering the programming mode press and hold the 🔑 button, LED 1 will stop flashing and the door open LED will start to flash for the number of seconds required (i.e. 5 flashes = 5 seconds) release the button once the required value is reached. LED 1 will start flashing to signal that other programming operations can be performed.

Privacy duration time (Factory preset 1 hour)

When in the programming mode press and hold the 🔕 button, LED 1 will stop flashing and the privacy LED will start to flash and show the time (each flash =15 minutes i.e. 6 flashes = 1.5 hour) once the time has been reached release the 🔕 button. LED 1 will start flashing to signal that other programming operations can be performed.

Number of rings (Factory preset 8 rings)

When in the programming mode press and hold the 🗣 button, LED 1 will stop flashing and the speak LED will start to flash showing the number of rings (each flash = 1 ring i.e. 6 flashes = 6 rings) once the value of rings has been reached release the 🗣 button. LED 1 will start flashing to signal that other programming operations can be performed.

5412 VIDEO SETUP & PROGRAMMING

4 Way dip-switch

1	2	3	4	Video Mode
ON	ON	OFF	ON	Coax video signal
ON	ON	ON	OFF	Balanced video signal

Switches 1 & 2 = Video end of line

3 Way dip-switch

1	S1	**ON** = N/O Switch between term. 18 & GND	**OFF** = Camera recall
2	S2	**ON** = N/O Switch between term. 19 & GND	**OFF** = Camera recall
3	●●	**ON** = N/O Switch between term. 20 & GND	**OFF** = Camera recall

Melodies Programming (factory preset melody 1)

- *Press and hold one of the two melody buttons "🔔 "(for approx 10 seconds) until the unit plays the current stored melody and emits a beep.*
- *Press the melody button again (left or right) to listen to the available melodies (maximum 9).*
- *When the chosen melody has been reached, do not press any buttons wait 3 seconds for the exit beep. The new melody is now stored.*

Number of Rings Programming (factory preset = 6 rings)

- *Press and hold the "🗣" button (for approx 10 seconds) until the unit emits a beep.*
- *Press the "🗣" button as many times as the number of rings required (i.e. 6 presses = 6 rings with a maximum of 9 rings)*
- *Once the number of rings required has been reached, wait 3 seconds for the exit beep. The new value is now stored.*

Privacy duration programming (factory preset = without time out)

- *Press and hold the "🔕" button (for approx 10 seconds) until the unit emits a beep.*

- *Press the "🔕" button again to set the privacy duration. Each time the button is pressed, it will increase the privacy duration by 15 minutes (starting from 0 up to a maximum of 20 hours i.e. pressing the button 8 times = 2 hours up to a maximum of 80 presses for 20 hours).*
- *Once the required privacy duration has been reached, wait 3 seconds for the exit beep. To set the privacy with no time out Press and hold the "🔕" button (for approx 10 seconds) until the unit emits a beep* ***do not press any other button, wait 3 seconds for the exit beep****. The new value is now stored.*

Door Opening Time Programming (factory preset 1 second)

- *Press and hold the "🔑" button (for approx 10 seconds) until the unit emits a beep.*
- *Press the "🔑" button for the number of seconds required (i.e. 6 presses = 6 seconds up to a maximum of 225 seconds). Once the required door open time has been reached, wait 3 seconds for the exit beep. The new value is now stored.*

ACCESSORIES

Art. 512A, Art.512R

Extension sounder for an apartment. This sounder can be wall mounted and will ring whenever the telephone it is connected to rings.

512A Connections	
4	Call tone input
-	0V (Ground)

ES/1

Timed strobe unit for the hard of hearing or noisy environments. The strobe will flash when a call is received and will continue flashing for an adjustable time period or until the reset button is pressed.

Connections	
POWER	12V AC or DC input
I/P	+ trigger
+O/P	12Vdc output
GND	Ground
RESET	Switched negative reset
NC	Normally closed relay connection
CO	Common relay connection
NO	Normally open relay connection

506N

The 506 relay is a universal double pole relay which can be used for many functions. One important function of the 506 relay when used on this system is to switch the video signal on multiple door systems. Alternatively, the 520MR can be used which combines a 506 relay and a 520M PSU into one housing.

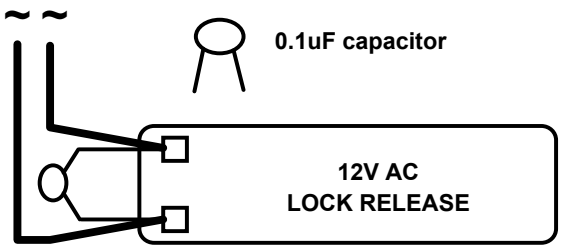
Connections	
1	24V AC or DC input (Coil side A)
2	12V AC or DC input (Coil side A)
3	0V (Coil side B)
4	+ transistor input
5	0V when using transistor input
CO1	Pole 1 Common relay connection
NO1	Pole 1 Normally open relay connection
NC1	Pole 1 Normally closed relay connection
CO2	Pole 2 Common relay connection
NO2	Pole 2 Normally open relay connection
NC2	Pole 2 Normally closed relay connection

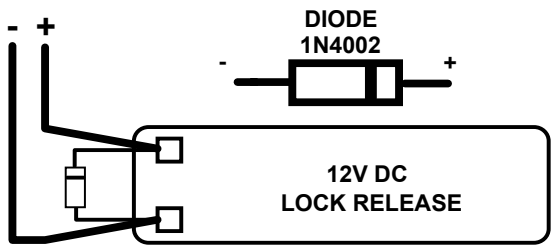
INSTALLATION

The wiring diagram towards the back of this manual should be followed carefully. Heavy duty conductors on wiring diagrams are shown heavily outlined, these wires should be doubled up.

- Check that all components are free from damage before installing (Do not proceed with installation in the event of damage).
- Keep all packaging away from children.
- Do not obstruct the ventilation openings or slots on any of the devices.
- All connections to mains voltages must be made to the current national standards (IEE Wiring regulations)
- Install an appropriate fused spur or isolation switch to isolate the mains.
- Isolate the mains before carrying out any maintenance work on the system.
- All intercom and access control cables must be routed separately from the mains.
- When the panel is mounted on an uneven surface, use additional sealant to protect from water ingress.

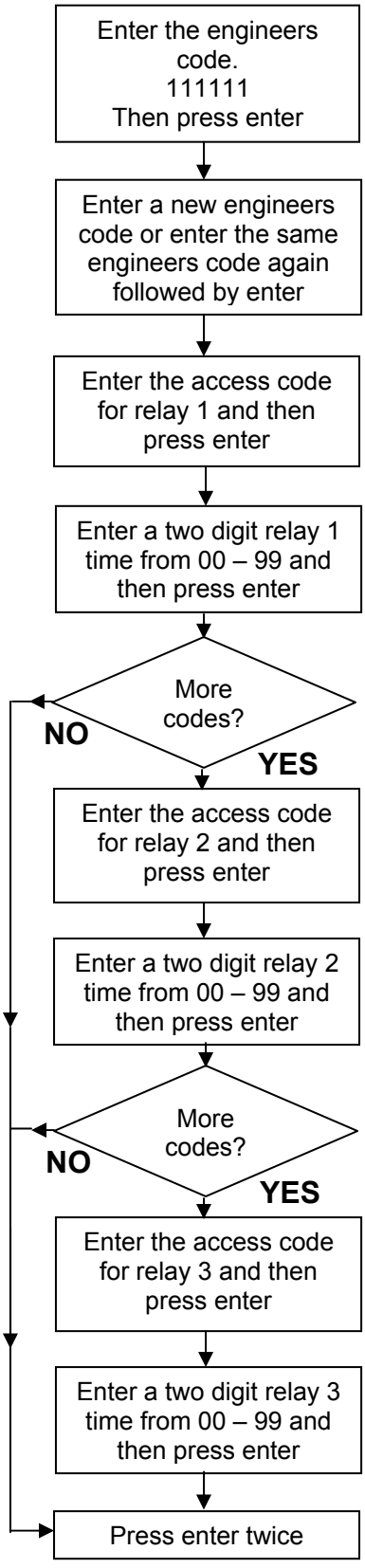
Lock release back EMF protection : A capacitor must be fitted across the terminals on an AC powered lock release and a diode must be fitted across the terminals on a DC powered lock release as shown in the diagrams below to suppress back EMF voltages.





VR4KCLM CODELOCK INITIAL PROGRAMMING

All programming is carried out using the codelock keypad. The programming menu is protected by an engineer's code. The factory default engineers code is 111111 (6x1). This code can be changed to any four to eight digit code during the program but must be different to the codes used to gain entry. Follow the flow chart to setup the system:-


Enter the engineers code. 111111 Then press enter
Enter a new engineers code or enter the same engineers code again followed by enter
Enter the access code for relay 1 and then press enter
Enter a two digit relay 1 time from 00 – 99 and then press enter
More codes?
NO
YES
Enter the access code for relay 2 and then press enter
Enter a two digit relay 2 time from 00 – 99 and then press enter
More codes?
NO
YES
Enter the access code for relay 3 and then press enter
Enter a two digit relay 3 time from 00 – 99 and then press enter
Press enter twice

The red LED will illuminate to acknowledge programming mode. If the red LED does not illuminate check the master code is correct. If the master code may have been changed from the factory default and you do not know what it is then follow the factory default procedure on the following page.

This code can be from 4 – 8 digits and will not activate a relay. It can only be used to enter programming mode.
Note this new code in the box provided on the next page. It will be needed to re-program the codes in the future.

This code will be used to open the door/gate (Relay 1). The code can be from 4 – 8 digits long and must be different from the engineer's code.

This is the time the relay 1 will energise for. 00 will latch the relay when the code is entered and require the code followed by clear to unlatch.

This code will be used to open the door/gate (Relay 2). The code can be from 4 – 8 digits long and must be different from the engineer's code.

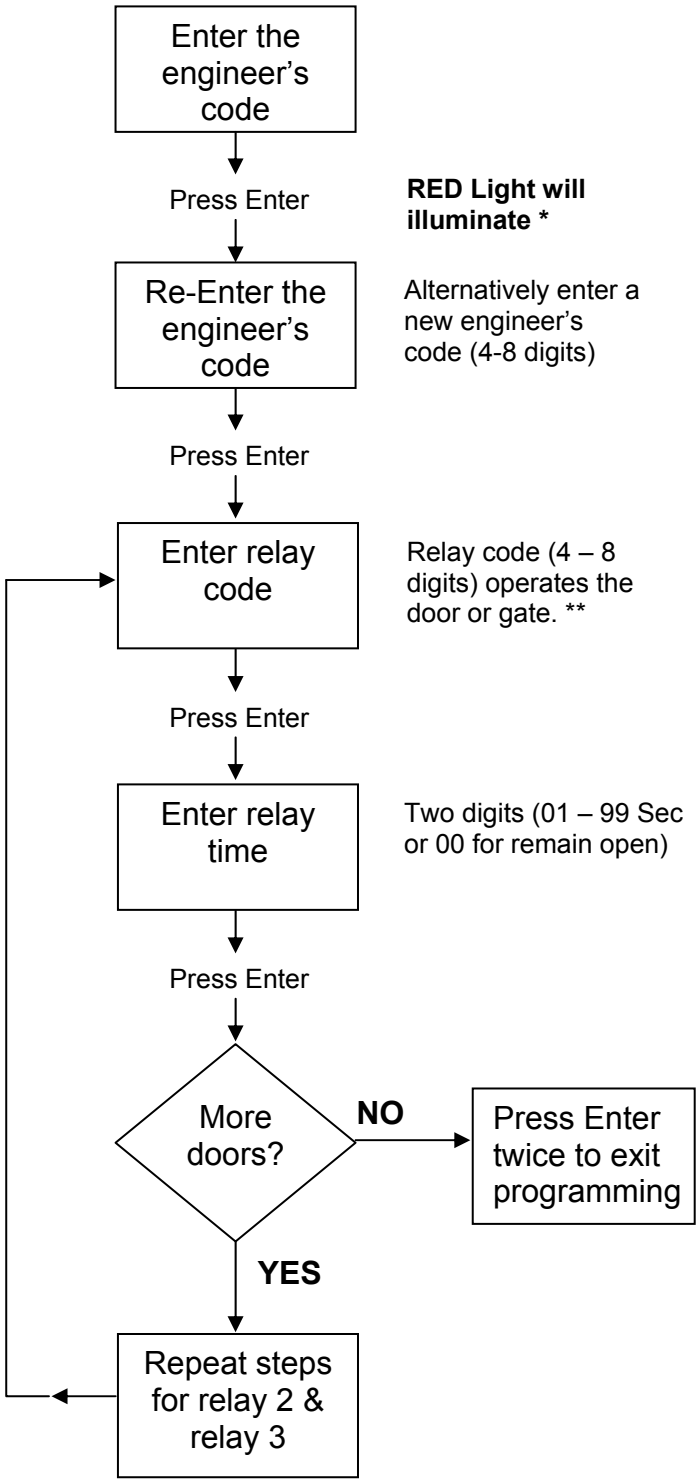
This is the time the relay 2 will energise for. 00 will latch the relay when the code is entered and require the code followed by clear to unlatch.

This code will be used to open the door/gate (Relay 3). The code can be from 4 – 8 digits long and must be different from the engineer's code.

This is the time the relay 3 will energise for. 00 will latch the relay when the code is entered and require the code followed by clear to unlatch.

The red LED will go off to confirm the exit from programming mode.

VR4KCLM CODELOCK REPROGRAMMING GUIDE


Enter the engineer's code
Press Enter
RED Light will illuminate *
Re-Enter the engineer's code
Alternatively enter a new engineer's code (4-8 digits)
Press Enter
Enter relay code
Relay code (4 – 8 digits) operates the door or gate. **
Press Enter
Enter relay time
Two digits (01 – 99 Sec or 00 for remain open)
Press Enter
More doors?
NO
Press Enter twice to exit programming
RED Light will switch off
YES
Repeat steps for relay 2 & relay 3

Engineers code	
Relay 1 code	
Relay 2 code	
Relay 3 code	

Relay 1 Time	
Relay 2 Time	
Relay 3 Time	

Notes:
* If the red light does not illuminate, the engineers code is incorrect. Follow the factory default procedure below.
** On the first loop of the flow chart its relay 1, second loop is relay 2.

FACTORY DEFAULT PROCEDURE
Step 1 Remove the power from the keypad
Step 2 Press and hold the enter button while re-powering the keypad
Step 3 Release the enter button. The factory engineer's code is restored to 111111 (6 x 1)

CABLE SIZE GUIDE

Suitable cables for this system are CW1308 and YY cable (Other similar cables are also suitable) Care should be taken to avoid excessive voltage drop. Follow the guide lines below.

Connections from door panel to telephones/videophones.

Connections	50m	100m	200m	300m	400m
Power	0.35mm²	0. 5mm²	0.75mm²	1.00mm²	1.5mm²
All Others	0.25mm²	0.35mm²	0.5mm²	0.75mm²	1.0mm²

Maximum acceptable resistance for power terminals 5Ω, all others 10Ω

Connections for power supply output to door panel and lock release connections. These connections are shown heavily outlined on the wiring diagram.

	50m	100m
Connections	0.5mm²	0.75mm²

The power supply should be located as close to the door panel as possible for best performance.
Maximum acceptable resistance for above cables 3Ω

TESTING THE INSTALLATION

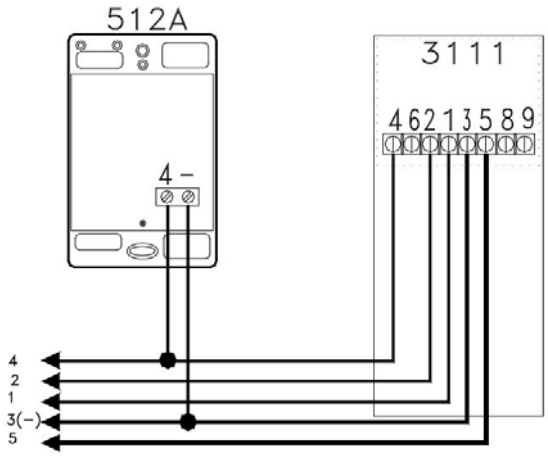
- Check all the connections have been made correctly and dip-switches have been set and then power up the system.
- Call the apartments. Check for call to all apartments, speech in both directions and lock release and correct operation of the SPEAK & DOOR OPEN LED's.
- If the volume of speech needs to be adjusted, this can be done by adjusting the presets on the rear of the amplifier at the door panel.

PANEL CARE

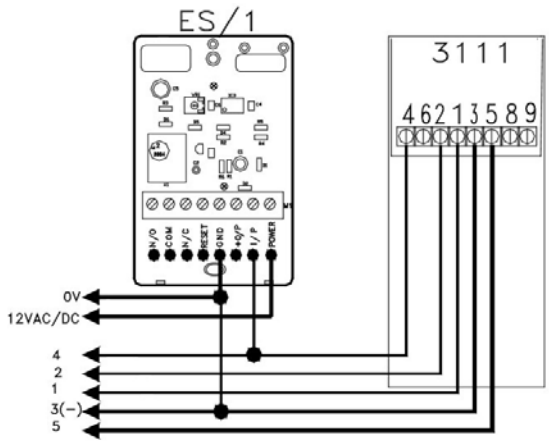
The door panel is manufactured from 12 Gauge 304 grade stainless steel. It is important that the facia is cleaned on regular occasions to prevent dirt build up and tarnishing of the metal. A general household metal polish can be used but care should be taken to follow the grain of the metal when polishing and also avoid any polish build up around the call button which may prevent the button from operating correctly.

ACCESSORIES CONNECTION GUIDE

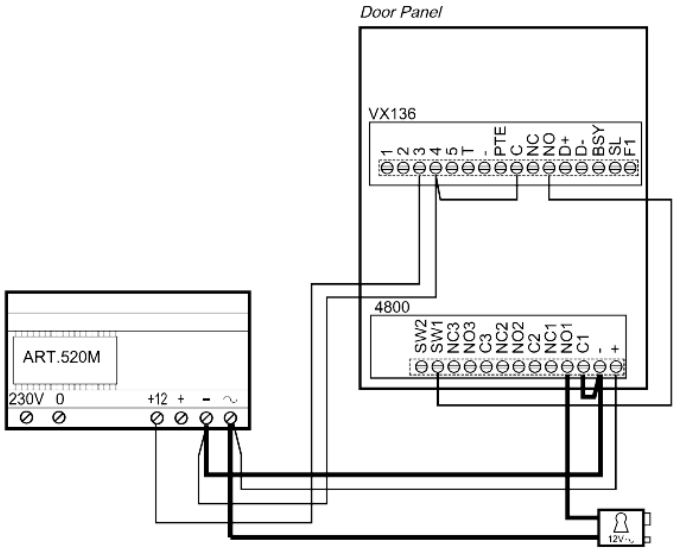
512A Extension sounder



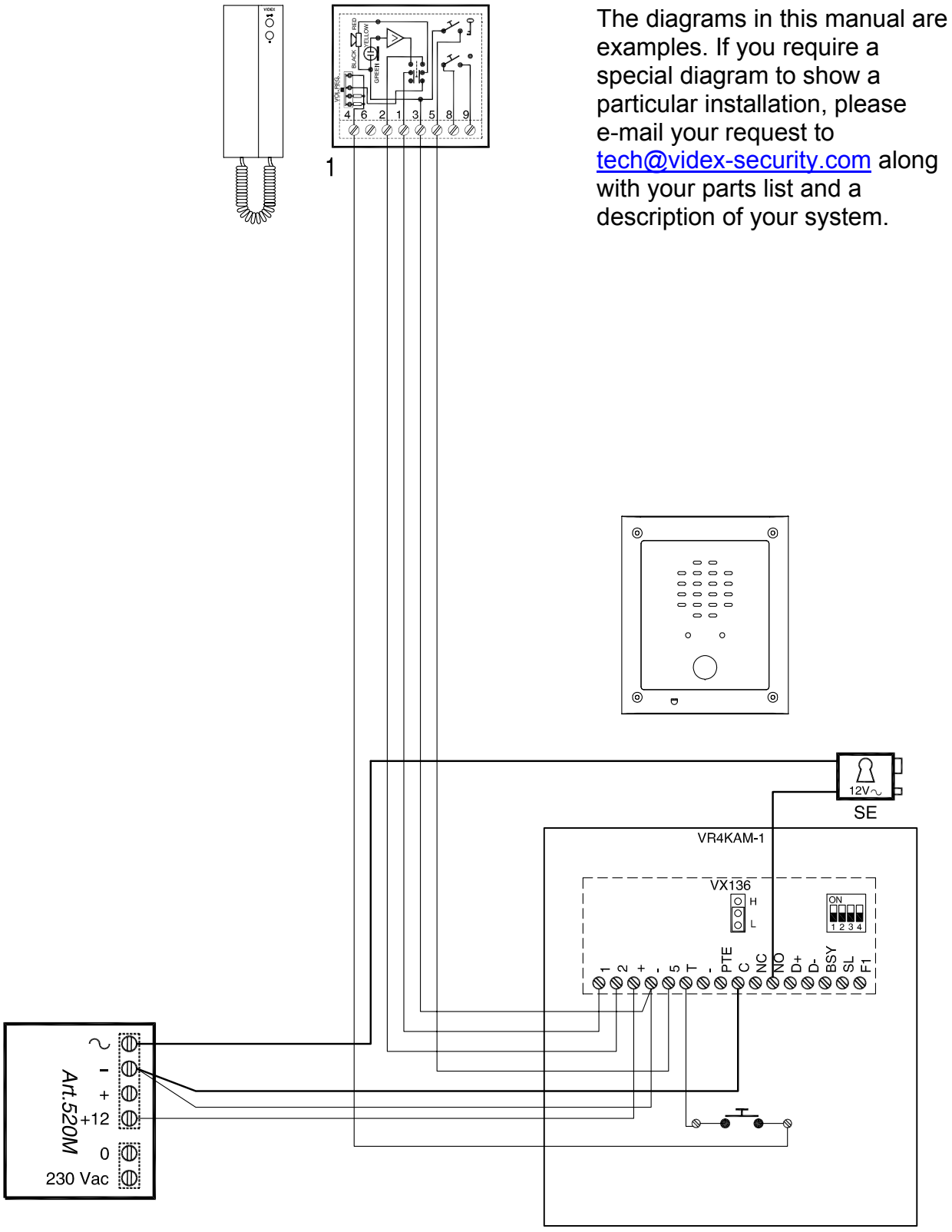
ES/1 Extension Strobe



Adding the 4800 codelock to a panel

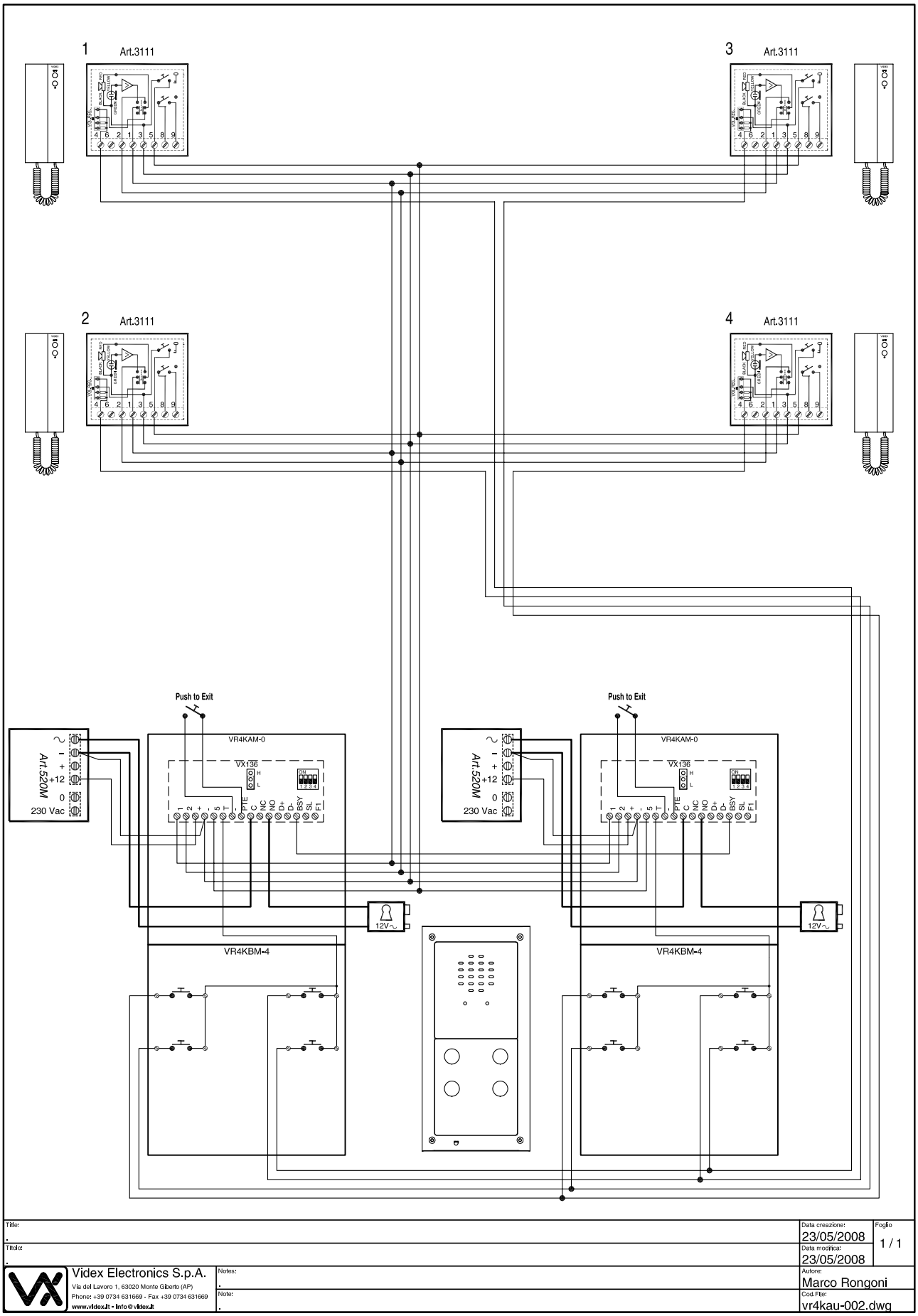


WIRING DIAGRAMS



The diagrams in this manual are examples. If you require a special diagram to show a particular installation, please e-mail your request to tech@videx-security.com along with your parts list and a description of your system.

Title: .		Data creazione: 23/05/2008	Foglio 1 / 1
Titolo: .		Data modifica: 23/05/2008	
Videx Electronics S.p.A. Via del Lavoro 1, 63020 Monte Giberto (AP) Phone: +39 0734 631669 - Fax +39 0734 631669 www.videx.it - info@videx.it	Notes: . Note: .	Autore: Marco Rongoni	
		Cod.File: vr4kau-001.dwg	



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Videx Electronics S.p.A. Via del Lavoro 1, 63020 Monte Giberto (AP) Phone: +39 0734 631669 - Fax +39 0734 631669 www.videx.it - info@videx.it	Notes: . Note: .	Autore: Marco Rongoni	
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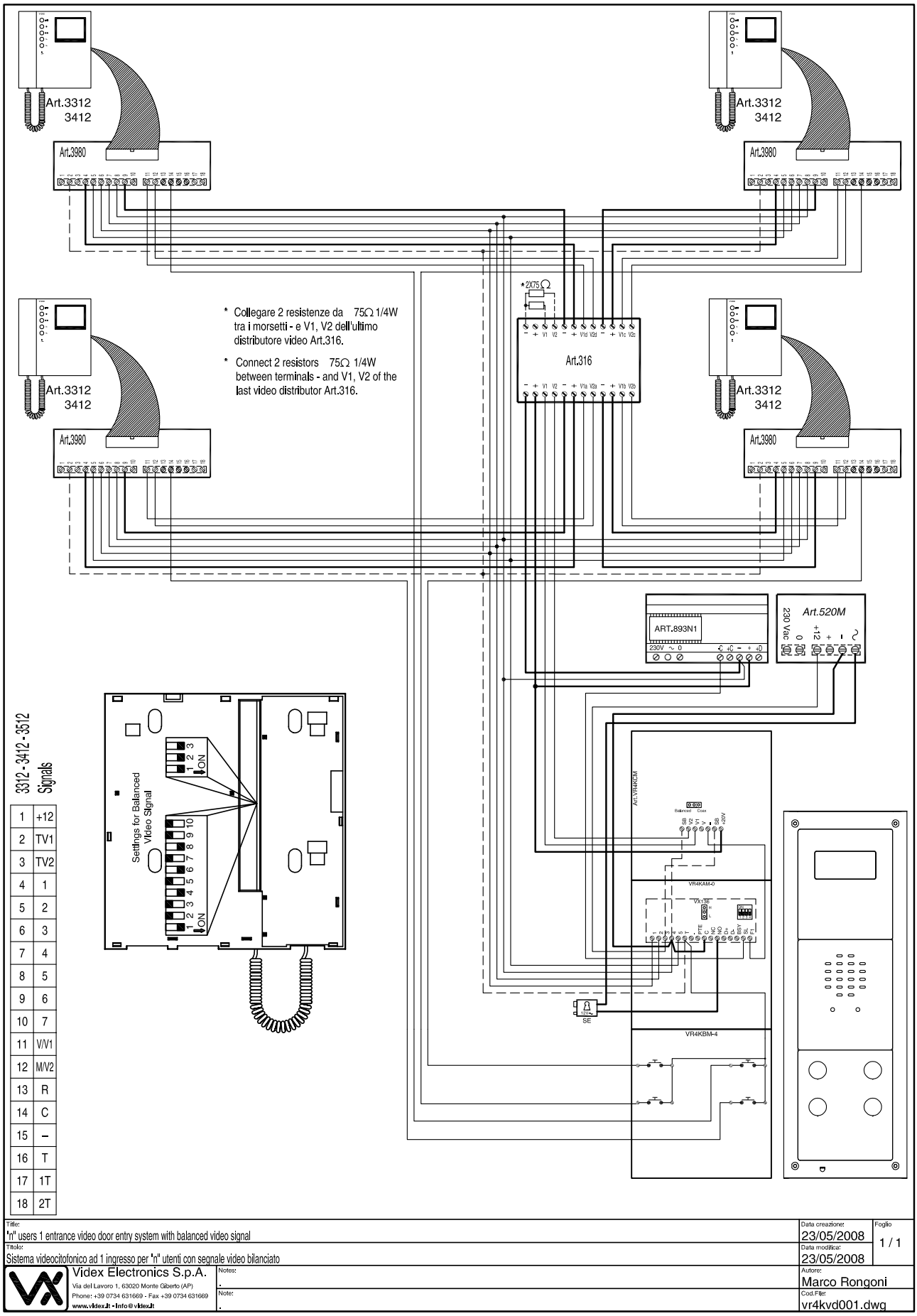
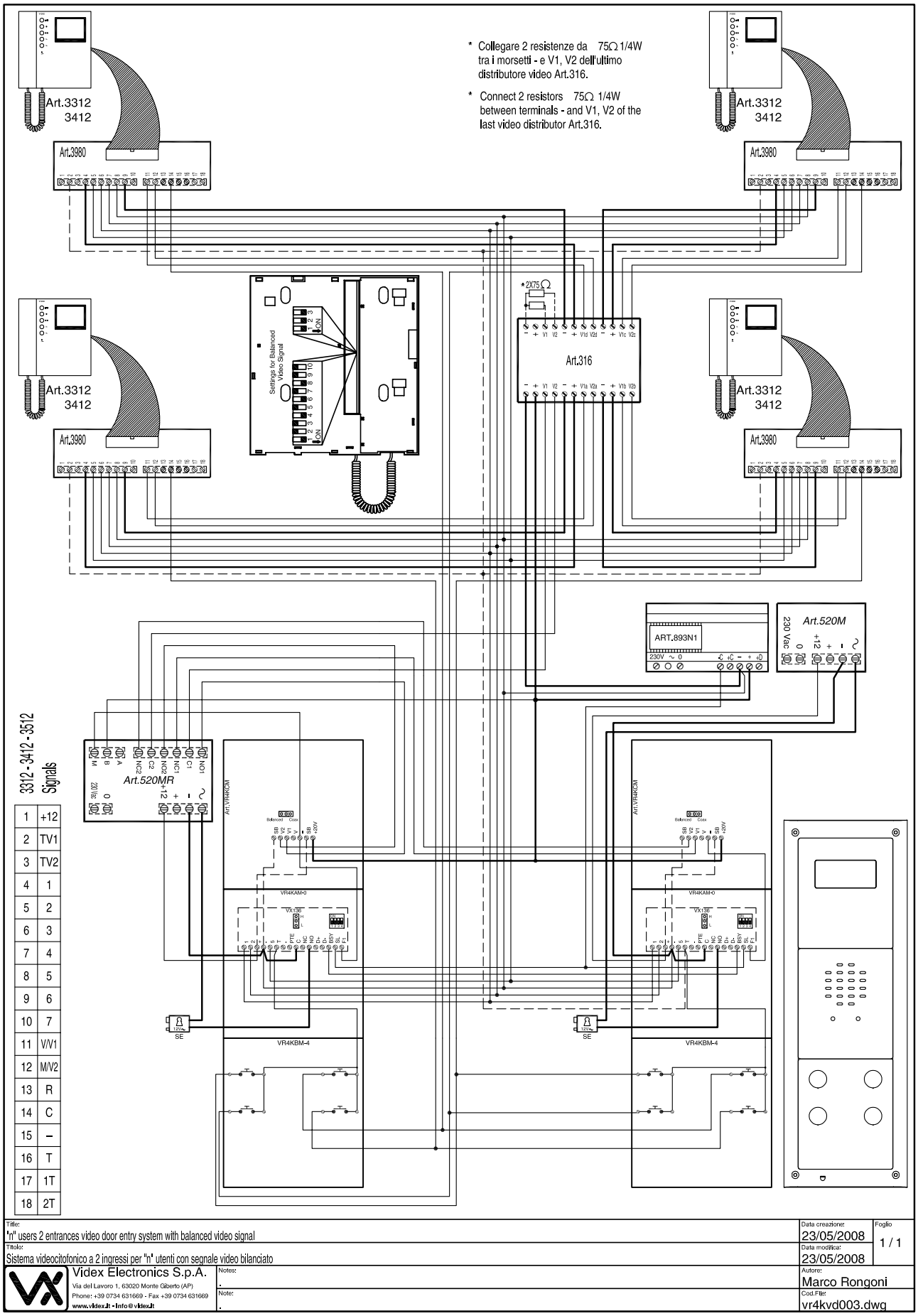


3312 - 3412 - 3512 Signals

1	+12
2	TV1
3	TV2
4	1
5	2
6	3
7	4
8	5
9	6
10	7
11	V/V1
12	M/V2
13	R
14	C
15	–
16	T
17	1T
18	2T

Title: 'n' users 1 entrance video door entry system with balanced video signal	Data creazione: 23/05/2008	Foglio 1 / 1
Titolo: Sistema videocitofonico ad 1 ingresso per 'n' utenti con segnale video bilanciato	Data modifica: 23/05/2008	
Videx Electronics S.p.A. Via del Lavoro 1, 63020 Monte Giberto (AP) Phone: +39 0734 631669 - Fax +39 0734 631669 www.videx.it - info@videx.it	Notes: . Note: .	Autore: Marco Rongoni Cod.File: vr4kvd001.dwg



Title: 'n' users 2 entrances video door entry system with balanced video signal	Data creazione: 23/05/2008
Titolo: Sistema videocitofonico a 2 ingressi per 'n' utenti con segnale video bilanciato	Data modifica: 23/05/2008
Videx Electronics S.p.A. Via del Lavoro 1, 63020 Monte Giberto (AP) Phone: +39 0734 631669 - Fax +39 0734 631669 www.videx.it - info@videx.it	Notes: . Note: .
Foglio: 1 / 1	Autore: Marco Rongoni
	Cod.File: vr4kvd003.dwg

TROUBLE SHOOTING

SYMPTOM	TEST
No speech from the door panel to the telephone.	Check terminal 2 on the amplifier for continuity to terminal 2 on the telephone.
	Check the voltage drops to approx. 1Vdc after the handset is lifted. (If not try another telephone)
	If all else fails try another amplifier at the door station
No speech from the telephone to the door panel.	Check terminal 1 on the door panel amplifier for continuity back to terminal 1 on the telephone.
	Check the voltage drops to approx. 4Vdc after the handset is lifted. (If not try another telephone)
	If all else fails try another amplifier at the door station
No speech in either direction	Check the 315mA fuse in the power supply
	Check for 12Vdc across terminals + & - on the door panel amplifier. This should be there all the time and comes directly from the PSU.
Lock will not operate from telephone	Check terminal 5 on the telephone. This terminal shorts to terminal 3 of the telephone when pressed (Becomes 0V) and sends a 0V to terminal 5 on the VX136 amplifier at the door panel which in turn triggers the relay
	Check the relay on the VX136 is energising. Use a continuity meter to check the switching.
Nothing happens when call button is pressed	Check the common of the button is connected to T on the VX136
	Check continuity from the other side of the call button to terminal 4 on the handset
Hum on the speech lines	Ensure all intercom cables do not run close to higher voltage cables
	Try another amplifier at the door panel.
Rolling or poor video picture	Check camera jumper setting is set correctly
	Check end of line resistors are fitted on last 316 video splitter (Non-coax) or end of line resistors plus termination resistors on any unused outputs of the 894 video splitter (Coax).
	Check dip-switches are set correctly on videophone
	On multiple door systems, check that only one camera is being switched on at a time. (When camera is switched on it will have 20Vdc across +&-
Camera recall does not work	Check terminal TV1 (● button) wire for continuity to T of relevant door panel.
On multiple door systems, lifting the handset causes feedback or speech from all doors at the same time.	Dip switch 4 of the amplifier is switched on. This switch can only be on, for one door systems. Remember to power down after making the change.

Northern Office
Videx Security Ltd
Unit 4-7 Chillingham Ind. Est.
Newcastle Upon Tyne
NE6 2XX
TEL 0870 300 1240
FAX 0191 224 5678

Southern Office
1 Osprey
Trinity Park
Trinity Way
London
E4 8TD
FAX 0208 523 5825

TECHNICAL SUPPORT
tech@videx-security.com
TEL 0191 224 3174
FAX 0191 224 4938
http://www.videx-security.com